

**Notice of Allowability**

Application No.

10/609,241

Examiner

Tuan V. Thai

Applicant(s)

CODILIAN ET AL.

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/27/2003.
2. ☒ The allowed claim(s) is/are 1-42 renumbered as 1-9, 11-13, 15, 10, 16-20, 14, 21-30, 32-34, 37, 31, 35, 38-41, 36 and 42 respectively.
3. ☒ The drawings filed on 27 June 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 6/27/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**TUAN V. THAI**  
**PRIMARY EXAMINER**

Application/Control Number: 10/609,241

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Attorney's Docket No.: K35A1263

IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE

In re application of:      Codilian et al.      Group:      2186  
Serial No.:                      10/609,241      Examiner:      Tuan Thai  
For:      *DISK DRIVE EMPLOYING A MODIFIED ROTATIONAL POSITION  
OPTIMIZATION ALGORITHM TO ACCOUNT FOR EXTERNAL  
VIBRATIONS.*

1. This action is responsive to communication filed June 27, 2003. Claims 1-42 are now allowed.

REASONS FOR ALLOWANCE

2. The following is an Examiner's Statement of Reasons for Allowance:

The prior art of record does not teach or suggest, alone or in combination, *all* the limitations of the amended claims of the current invention (claims 1 and 22) wherein a disk drive comprises a disk having plurality of tracks, a head actuated radially over the disk, a command queue for storing a plurality of commands pending execution, and a disk controller for executing a rotational position optimization (RP0) algorithm to

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select a next command to execute from the command queue relative to an estimated access time comprises an estimated seek latency required to move the head radially over the disk to a target track comprising the next command; an estimated settle latency required for the head to settle over the target track, wherein the settle latency occurs after the seek latency; and an estimated rotational latency required for the disk to rotate until the head reaches the next command, wherein the rotational latency occurs after the settle latency. Particularly, the prior art of record do not teach the RPO algorithm increases at least one of the estimated seek latency, the estimated settle latency, and the estimated rotational latency for each command in the command queue if an external vibration is detected. In light of the foregoing, claims 1 and 22 of the present application are found to be patentable over the prior arts.

Claims 2-21 and 23-42 further limit the indicated allowable independent claims 1 and 22. These claims are therefore allowable for the same reason as set forth above.

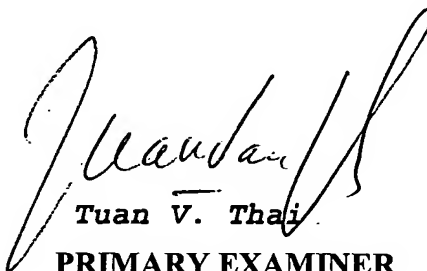
Any comments considered necessary by Applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Thai whose telephone number is (571)-272-4187. The examiner can normally be reached on from 6:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew M. Kim can be reached on (571)-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVT/July 14, 2005

  
Tuan V. Thai  
**PRIMARY EXAMINER**  
**Group 2100**